



1. Water, sewer and drainage infrastructure

The New Orleans Sewerage and Water Board has responsibility for one of the most complex infrastructure systems in the country. Encompassing drinking water, sewer, and drainage underground infrastructure, it also includes treatment plants, pumps, canals, power generation plants, electrical circuits, controls and instrumentation. These systems are worth billions of dollars. The systems were first put in place at the turn of the twentieth century, when New Orleans residents invested the equivalent of billions of dollars in today's money to establish these systems.

The Board governs a special district that receives funding from ratepayers, property tax millages, and bond proceeds. Members of the Board include the Mayor, the two at-large members of the City Council, two members of the Board of Liquidation, and seven citizens appointed by the Mayor to 9-year overlapping terms. The City Council has the right to approve rate increases.

All older cities in the nation are faced with the huge costs of upgrading aging infrastructure, especially the underground systems that were installed and financed over the last 200 years. Underground pipes typically have a design life of between 65 and 100 years, which accounts for the pipe ruptures experienced from time to time in older cities. Most aboveground water and wastewater treatment plants were upgraded with federal funding in the 1970s to meet the requirements of the Safe Water and Clean Water Acts, but they are now reaching or exceeding their design life. The 2009 Report Card for America's Infrastructure issued by the American Society of Civil Engineers gives the country a D grade for drinking water and wastewater systems. "Leaking pipes lose an estimated seven billion gallons of clean drinking water a day, and there is an annual shortfall of at least \$11 billion to replace aging facilities that are near the end of their useful life and to comply with existing and future federal water regulations. Additionally, aging systems discharge billions of gallons of untreated wastewater into U.S. surface waters each year, and an estimated \$390 billion must be invested over the next 20 years to update or replace existing systems and build new ones to meet increasing demand." Although New Orleans' water and sewer challenges are very substantial, the city is by no means alone in facing these realities.

Before Hurricane Katrina the Sewerage and Water Board had spent \$187 million on sewer repairs over seven years and was beginning a similar process with the water system in order to reduce significant water leakage. The impacts of Hurricane Katrina, such as corrosion from salt water, surge waves, and soil migration, accelerated already existing problems in the water, sewer and drainage systems and it is particularly difficult to find all impacts in the underground system. In addition, the system's revenues have declined because of a reduction in the number of ratepayers, and a reduction in revenue for drainage from property taxes. FEMA does not pay for hurricane damage that is not easily identifiable in the underground infrastructure, even though engineers believe that it is likely that hidden Hurricane Katrina damage exists.

In 2006, it was estimated that the sewer, water and drainage systems would require a total capital investment of approximately \$5.7 billion by 2030, much of which is currently unfunded. One to two

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www.asce.org/reportcard.

DISASTER-RELATED FEDERAL FUNDING FEDERAL FUNDING FUNDING (CURRENT)

Water/sewer/drainage repairs and hardening against future storms (-\$5.7 billion*)

RATE PAYERS

How to pay for water, sewer, and drainage infrastructure costs

* 2006 estimate of total capital investments needed to repair the city's water, sewer, and drainage systems by 2030. billion of that figure is estimated to be the cost of repairing and replacing underground infrastructure. It is difficult to know the extent of the need for underground infrastructure without costly and time-consuming evaluations.

Normal operations and maintenance and capital programs have traditionally been funded by users' payment of utility charges. The combination of the extent of capital improvement needs and the reduced number of ratepayers compared to before the storm would result in rate hikes that ratepayers could not possibly support.

A. DRINKING WATER SYSTEM

New Orleans' drinking water comes from the Mississippi River. Because of all the activity in and adjacent to the Mississippi near New Orleans, the water is vulnerable to contamination, but drinking water is monitored as required by law and water quality meets all state and federal standards.

The drinking water system network includes 1,610 miles of water mains, 15,000 gate valves, 16,500 fire hydrants, and about 160,000 service connections. High pressure must be maintained in the distribution system to maintain disinfection and for fire protection. There are two water treatment plants: the Carrollton plant on the East Bank and the Algiers plant on the West Bank. Water is distributed to the East Bank through 6 main arteries (underground pipes) from 30 to 50 inches in diameter, and to the West Bank through 3 main arteries ranging 20–26 inches in diameter.

Before Hurricane Katrina, the city normally used approximately 133 mgd (million gallons per day), with a maximum consumption of about 250 mgd. About 30% of the drinking water was either provided free (to government agencies and to fight fires) or lost through leaks. In 2003 the Board prepared a capital improvement plan for the water distribution system that identified priority improvements over 27 years with the goal of reducing water leakage. The plan estimated that about one-third of the mains were nearly 100 years old and one-third were less than 40 years old. The plan identified needs including an asset management plan, a rehabilitation program, and a replacement program, with total costs in the range of \$3 billion.

After the storm, leakage has become even greater, probably coming from many small leaks rather than a few large ones. The Carrollton water treatment plant services the East Bank and produces 120 mgd, 5 mgd more than before Hurricane Katrina to service a smaller population. Leaks are hard to identify and replacement of pipes is expensive and takes a long time. Water distribution system leaks also undermine roadways and cause potholes and sinkholes.

B. SEWERAGE

Like the drinking water system, the city's wastewater system is also divided into separate east and west bank systems with two sewage treatment plants. Before Hurricane Katrina, the entire system capacity was 280 mgd with average daily flows of 90 mgd in dry weather. The system has 1,350 miles of gravity lines and 100 miles of force mains conveying wastewater from 83 pumps and lift stations, both above ground and below ground. Hurricane Katrina caused extensive damage to the system. In addition, the Board's power generation plan is nearing the end of its useful life.

In 1998, like many older, urban sewer systems, the Sewerage and Water Board signed a consent decree with the US Environmental Protection Agency agreeing to identify and eliminate sewer overflows that in stormy weather brought raw sewage into the river. Before Hurricane Katrina, the Sewerage and Water Board had completed evaluation of the system and was in the process of repairing the system. Because of storm-related damage, the assessment has to be repeated and some of the repairs redone. FEMA does not pay for this work.

The S&WB is developing an innovative project to restore wetlands as a way of treating effluent from the East Bank wastewater treatment plant. The plant is located near wetlands degraded as a result of channelization of the Mississippi River and saltwater intrusion from the Mississippi River Gulf Outlet (MRGO). The S&WB received a feasibility and conceptual design grant for the project and Orleans and St. Bernard Parishes have applied for a state Coastal Impact Assistance Program grant to design and permit a demonstration project and, if proven viable, fully implement the wetlands approach. If successful, this project would at least partially obviate the need for expensive infrastructure investments.

C. DRAINAGE

New Orleans' drainage infrastructure is owned and operated by the S&WB and includes 23 drainage pump stations, 13 underpass pumping stations, 260 miles of open and covered canals, and 1,515 miles of subsurface pipes, both gravity and pressurized. With a pumping capacity of over 30 billion gallons—more than the flow rate of the Ohio River—this is the biggest stormwater removal system in the country. All rainwater is pumped to Lake Pontchartrain, the Industrial Canal, the Intracoastal Waterway and Bayou Bienvenue. Dry weather flow goes to the River, the Lake and the Intracoastal Waterway. The system also serves about 2,250 acres in Jefferson Parish.

Funding sources include designated millages and programs such as the Southeast Louisiana Urban Flood Control Program (SELA), which since 1997 has provided 75% federal funding of drainage projects in Orleans Parish, including an additional 2006 appropriation at 100% federal expense. After Hurricane Katrina, federal funding to accelerate the completion of SELA was not sufficient for remaining projects due to rise in post-storm construction costs. Congress then approved an additional \$1.3 billion for the completion of their projects. While Phase 1 of the Napoleon Avenue Canal was completed in 2003, work on the Algiers Drainage Improvements and Florida Avenue Canal have yet to begin, but are in the design stage. The Army Corps of Engineers is spending \$570 million for canal gates, new pump stations and repairs.

2. Public Safety Facilities and Services

A. NEW ORLEANS POLICE DEPARTMENT (NOPD) FACILITIES

The 15 police facilities in New Orleans were reduced to two immediately after Hurricane Katrina. The police department has been operating in temporary or damaged facilities while waiting for renovated and new facilities to be constructed. All eight police district buildings are slated for repair, renovation or replacement. As of late 2008, four facilities have been completed, including police headquarters. The majority of projects are renovations of existing facilities.

The Police Department is funded from the General Fund, Louisiana Commission on Law Enforcement (LLE), federal and state grants and self-generated funds. The total 2009 budget is \$12.6 million and the department has 1,859 full time employees. The unfunded programs for which the department did not receive budget support in 2009 included, mobile in-car video cameras, motorcycles, copy machines, janitorial services, and tasers. The largest unfunded budget items were \$10 million for overtime and \$4.5 million for recruits.

The Justice Facilities Master Plan for New Orleans includes a discussion of needs and directives for the police department. A new police headquarters and parking structure are projected to be needed by 2030. The headquarters must be retrofitted to become more storm-resilient. There is a desire to locate the headquarters

more centrally downtown. Facilities for a training academy, the Special Operations Division, and the Emergency Operations Center, as well as additional needs and directives, are also included in the Facilities Master Plan.

Community Policing

The City has been facing the challenge of high crime since before Hurricane Katrina. A number of studies in the period 2001–2005 recommended a variety of improvements, including establishment of a performance-and outcome-driven process focused around reporting and analysis of statistical data—the COMSTAT system first developed in New York City. The Police Department did institute the "CrimeStat" system, which publishes the statistics on a delayed schedule on the city's website. After the storm, the department commissioned a broad strategic plan from Brown Group International that was presented in July 2007. The plan provides analysis and recommendations in several broad categories: management, service demands, resources (including physical facilities and information technology), collaboration, and accountability.

The framework for the specific recommendations in the Brown Report is community policing, which the report described as informed by three perspectives:

- **A neighborhood perspective**—recognizing that each neighborhood is different and services need to be customized.
- **A community partnership perspective**—where the police department forms interactive partnerships with the public to resolve neighborhood crime problems and officers have purposeful interactions with citizens.
- A problem-solving perspective—developing in-depth understanding of a neighborhood in order to determine the underlying causes of criminal activity and quality of life issues and working cooperatively with citizens to solve the problems. "The 'best' solutions are those that satisfy community members, improve safety, diminish anxiety, lead to increased order, strengthen the ties between the police and citizens, and involve a minimal amount of coercive power."²

The report emphasized the role of the patrol officer in daily interaction with community members and the need for a flexible management style. The ability to provide the time needed for effective community policing depends on managing non-emergency calls more effectively, as well as a number of other management and philosophical changes. The report emphasizes that community policing is not just outreach to the public or special programs for citizen participation, and that it is a complex change that affects all aspects of delivering police services to the public.

In the mid-1990s, the New Orleans Police Department quite successfully used community policing methods in public housing developments but the method was not extended to the entire city. When the Brown Report was released, the police department made a commitment to more effective community policing. However, even though crime rates have declined somewhat, citizens have remained frustrated by slow improvement in high crime rates, despite investment in a number of changes. In cities where community policing has been most effective, it is supported by a wide variety of other city agencies that work closely with the police. The "silo" culture of local government in New Orleans makes that especially difficult.

Although the Police Department is publicly committed to community policing, it is not clear that the program is strong enough to be visible. Each officer is supposed to spend at least an hour a day walking a beat and each district is supposed to have at least one officer walking on the street in every hour between 7 am and 7 pm. Since the police districts are quite large, and officers are exempted in rainy or very hot weather, the visible presence of police officers in neighborhoods, which is part of the value of community policing, is in question. Community policing is not mentioned in the 2009 police budget (except as a zero line item under LLE–Louisiana Commission in Law Enforcement).

² A Strategic Plan of Action for the New Orleans Police Department, Brown Group International, July 2007, p. 38.

Police Support Organizations

Police officers work with the 24 neighborhood improvement and security districts on crime prevention. There are also three police-district based citizen support organizations that provide equipment and supplies to their district policemen: COPS2, COPS3, and COPS8.

New Orleans Police and Justice Foundation (NOPJF)

The New Orleans Police and Justice Foundation is a nonprofit organization founded in 1995, first to enhance police capacities and operations, and then, in 2003, expanding its mission to encompass the entire New Orleans criminal justice system. The NOPJF has been active since Hurricane Katrina in supporting efforts to restore confidence in the justice system in terms of human capital, critical infrastructure and improvements to operational effectiveness and efficiency. The organization's activities are funded through grants and private donations.

A current focus of NOPJF is to enhance communications among the disparate entities in the criminal justice system through development of the Orleans Parish Information Sharing and Integrated System (OPSIS) that involves the following agencies:

- · Orleans Parish Criminal Sheriff
- · Orleans Parish District Attorney
- · Orleans Parish Criminal District Courts
- New Orleans Office of Homeland Security
- · Orleans Parish Indigent Defender Program
- New Orleans Police Department
- New Orleans Police and Justice Foundation

Before Hurricane Katrina, there were multiple incompatible information systems—even within the same agency. The loss of information systems in the aftermath of Hurricane Katrina made agencies aware of the importance of information sharing. Examples of OPSIS projects include the Court Notify subpoena system that addresses the critical problem of subpoena service, and the Comprehensive Evidence Management System, shared by NOPD and the Criminal District Court Clerk, that replaces each agency's inadequate evidence inventory system and directly addresses post-flood evidence problems.

Another NOPJF program is Project ASPIRES, which focuses on reforming and streamlining criminal evidence processing, management and storage. The hurricane decimated evidence facilities and operations. Formed in 2007, the ASPIRES group is made up of the NOPD, District Attorney's Office, Criminal Court, Clerk of Court, Defense Counsel and NOPJF. The group has collaborated to accomplish activities such as training and certification of technicians, creation of a best practices and procedures manual, and procurement of new technology.

Community activities and organizations

Night Out Against Crime

NOPD is a part of the National Night Out Against Crime program. Annually in August, the NOPD sponsors block parties with entertainment, food, and community conversation each year on the scheduled date. The event is very successful and helps communities get more familiar with police officers. As a result, neighborhood citizens become more actively involved in their communities relative to safety and crime prevention.

New Orleans Crime Coalition

Launched in 2007, the New Orleans Crime Coalition is a citizen-based organization that advocates for more resources to fight crime including additional prosecutors, civilian employees that do administrative police work so officers can be out on the street, the OPSIS project, more professional development and training for police officers, offender reintegration programs to decrease recidivism, effective video surveillance system, and enhanced community policing.

Metropolitan Crime Commission

Founded in 1952, the Metropolitan Crime Commission (MCC) is a non-profit, privately-funded, citizen's organization that is dedicated to exposing and eliminating public corruption and to reducing the incidence of crime. MCC provides information and research on the criminal justice system, such as the Orleans Parish Criminal Justice System Accountability Project in 2007–2008, that tracked the efficiency of the system in dealing with offenses.

Crimestoppers

Crimestoppers is a non-profit organization that is operated by civilians. The organization works closely with law enforcement by passing on information provided by callers through the tipline.

B. NEW ORLEANS FIRE DEPARTMENT (NOFD) FACILITIES

The New Orleans Fire Department responds to emergency situations including fire, hazardous materials and weather. Its Fire Prevention Division is also responsible for enforcing all laws and ordinances that cover fire protection, including inspection, investigation, plan reviews, issuance of fire reports, and issuance of various permits, as well as safety awareness programs aimed at fire education and awareness to prevent and/or reduce fires within the city. Its 2009 budget is \$54.5 million and it has 767 full time employees. The only source of funding in 2009 is the General Fund.

As of early 2009, the condition of Fire Department facilities was as follows:

- 22 out of 33 stations were damaged by storm flooding and 20 remain out of service.
- NOFD currently operates from 30 locations.
- 33 recovery projects for the Fire Department were under way, the majority of them renovations of existing facilities.
- There were no classroom for ongoing trainings and the field training facility located near the NASA facility needed to be upgraded.
- Most engine houses were more than 50 years old, the life expectancy of a typical engine house.

The Department has adopted a Fire Station Master Plan which classifies station reconstruction according to those that need mandatory rebuilding; those that are needed for better coverage and access; and those needed to cover a "larger footprint." The existing conditions phase of the Station Master Plan concluded that pre-storm stations were very well-located for maximum coverage. Areas that were determined to lack coverage included New Orleans East, the West Bank, and the area around Tulane Corridor.³ Working with an architect, the Department has also developed a resilient engine house design prototype that is elevated and can withstand any kind of disaster, including a Category 5 hurricane.

New Orleans Fire Department Fire Station Master Plan Executive Report and Findings, Phase II. November, 2008. Courtesy New Orleans Fire Department.

Equipment needs include:

- More support staff vehicles (for fire chiefs, *etc.*). Most support vehicles have more than 50,000 miles, which is beyond their recommended lifespan. This poses a liability to the City.
- An additional hazmat suit (only one is available now).
- Response vehicle maintenance.
- Replacement of handheld radios.
- Software needed for 35 laptops so they can be put into service.

Funding requests that were not included in the 2009 budget included radio maintenance, certification for recruits, desktop radios, printers, additional fire prevention staff, additional fire education officer, hazmat baseline physicals, and medical costs.

Hurricane Katrina revealed the age of the water supply infrastructure throughout the city, which was already in disrepair. Today, many hydrants are still inoperable due to storm-related damage (every hydrant is tested twice a year). There was salt water damage to water pumps, which need to be replaced

Before Hurricane Katrina, the New Orleans Fire Department employed 825 uniformed and clerical staff. Today there are 644 personnel. Department officials state they would like to have around 770 employees to meet current demand, but that recruitment of uniformed officers is difficult because they believe the Department does not offer a competitive salary and pension plan as compared to other fire departments. This makes recruitment of new staff and retention of existing staff both extremely difficult. Over the next 5 years, the department estimates that it will need to replace about one-third of its staff with new recruits.

The Department's current budget is about \$54 million annually - including operating expenses (about \$1.2 million) and personnel (about \$52.8 million)—compared to about \$60 million before Hurricane Katrina.

Challenges include:

- Hazards complicated by abandoned buildings, where people often camp with candles or small fires that can easily get out of hand.
- · Hazardous materials that travel throughout the city.
- Insufficient staff and equipment to deal with fires in high rise buildings.
- Better public education around fire codes and fire safety needed, particularly in Spanish and Vietnamese.

Priority needs:

- 1. Personnel
 - · Funding for recruitment of new staff from around the US, particularly multi-lingual personnel
 - Increased budget to pay competitive compensation.
- Facilities
 - Renovate training area and provide interagency training facilities.
 - Renovate and modernize all stations over 50 years old.
- 3. Equipment and tools
 - Apparatus lease program
 - Better maintenance and service of vehicles
 - More support vehicles
 - · More hazmat suits

4. Other

- Increased budget for public education materials and translation.
- Replace all inoperable hydrants and water pumps.
- Interagency incident management teams (long-term)⁴

In the long term, the Department would like to see the creation of interagency incident management teams that would enhance training and communications among all relevant agencies. There are federal funds available to support creation of these teams.

C. NEW ORLEANS EMERGENCY MEDICAL SERVICE

New Orleans EMS is the sole 9-I-I EMS provider for the City of New Orleans. Since Hurricane Katrina, the EMS budget resides within New Orleans Health Department, but its operations are under the jurisdiction of New Orleans Office of Homeland Security and Emergency Preparedness. EMS has a 2009 budget of \$19.7 million from the General Fund, the federal grants, and state grants. EMS collects fees for emergency calls that are billable. Unfunded priorities included additional personnel and another ambulance. EMS has set a performance goal of response in less than 12 minutes 90% of the time.

New Orleans EMS is comprised of just over 98 full time employees including 3 Board Certified Emergency Medicine Physicians, over 60 paramedics and 44 EMT (Emergency Medical Technician)-basics. Every ambulance on the streets has at least one paramedic on board, trained in Advanced Cardiac Life Support, Pediatric Advanced Life Support, Prehospital Trauma Life Support, Haz-Mat Operations and CPR. New Orleans EMS also provides rescue operations. They have a swift water rescue team, a bike team, and a high-angle rescue team. NOEMS operates between 7 to 11 ALS (Advanced Life Support) units twenty-four hours per day. In addition, EMS operates an ALS light rescue truck which is the primary vehicle extrication unit for the City. Pre-Hurricane Katrina, EMS answered over 55,000 calls for service. Annual calls in 2009 are estimated to be approximately 50,000. In addition to serving as the primary 9-1-1 provider for the City of New Orleans, NOEMS covers large City events, such as Mardi Gras, French Quarter Festival, BCS Bowl Games, Bayou Classic, Essence Festival, New Year's Eve and several other large scale events.

3. Community Information/311 Service

New Orleans operates a 311 call line as a non-emergency information line for the city services of New Orleans and the contact number for the Mayor's Office of Public Advocacy. Most cities maintain a 311 call line, and some cities also maintain community information departments and comprehensive community information websites.

New Orleans 311 operates from 7 AM to 11 PM Mondays through Fridays and from 8 AM to 5 PM on Saturdays. There is no one answering phones on Sundays, but residents can leave a message and someone should respond within 48 hours. The main function of 311 is an information source to residents with questions about city services or to report potholes, code violations, debris, and illegal dumping. The office can provide numbers for all other city departments, answer questions about street maintenance, and enroll residents in the city-assisted evacuation program. Calls are often directed to other departments that deal with particular issues. The 311 Call Center also serves as the information center during emergencies or disasters affecting the city (the Citizen Assisted Evacuation Plan). The system has been widely criticized as being ineffective, and the projected number of service requests closed for 2009 is only 50%.

New Orleans Fire Department. Personal interviews, January 2009.

4. New Orleans Public Library System

The New Orleans Public Library Commission is one of the "unattached" boards and commissions of the city. Of its 2009 budget of \$7.3 million, \$6.8 million is from a dedicated library millage, \$312,000 from a Gates Foundation grant (through the General Fund) and \$120,000 in state grants. The Library system has 96 full time employees. All thirteen of the city's libraries were damaged as a result of Hurricane Katrina, eight of which were completely unusable. In a few years, five New Orleans neighborhoods will have new libraries and the rest will be renovated. The 2009 ORDA budget allocates \$13,900,000 in D-CDBG funds for five new branch libraries and a storefront library in Central City.

New Orleans has been served by a central main library branch as well as distinctive neighborhood and storefront branches. This has allowed for and encouraged a degree of widespread accessibility. Today libraries around the country are being used in more ways than just for checking out books. The infusion of digital media and computers with internet access, interior cafés, and community conference rooms with full-service amenities, has also allowed library branches to play the additional roles of meeting places, teaching environments, and community centers.

Before Hurricane Katrina, New Orleans Public Library (NOPL) operated 13 public library facilities throughout

TABLE 10.1: LIBRARY STATUS 2009	
BRANCH	STATUS
Algiers Branch	New library to be built; temporary open
Alvar Street Branch (Bywater)	Renovated and open
Children's Resource Center Branch (Uptown)	Open, being repaired
Cita Dennis Hubbell Branch (Algiers Point)	Closed (operating temporarily)
East New Orleans Branch	New library to be built; temporarily open
Rosa Keller Branch (Broadmoor)	To be reconstructed while maintaining historic building
Martin Luther King Branch (Lower Ninth Ward)	Renovated and open
Milton Latter Branch	Open
Main Branch	Open
Norman Mayer Branch (Gentilly)	New library to be built
Mid-City Branch	Open/storefront
Nora Navra	New library to be built
Robert E. Smith Branch (Lakeview)	New library to be built; temporarily open

SOURCE: HTTP://NUTRIAS.ORG/~NOPL/RECOVERY/RECOVERY.HTM

Orleans Parish, including 12 branches and one main library, providing a total of about 0.5 square feet of library space per capita, and placing it in the lowest quartile of per capita library space nationally. Its total per capita print holdings (1.69 in 2004) placed it below the 25th percentile in relation to its peer libraries in other cities, and its budget—\$18.45 per capita—placed it in the 16th percentile nationally. Before the storm, the system had 216 employees and declined dramatically to 20 after the storm.

In 2008, the New Orleans Public Library Commission adopted an ambitious master plan to create a world class library system. The major goals are for the system to enhance the preservation of the city's culture and history, to reestablish accessibility, and to be gateways for education, information, communication, culture, and recreational enrichment. The Library Master Plan recommends that print items, per capita, be increased by 45%, which would place NOPL on average with its peer libraries. A staff size of 250 (150 for branches, 4 for the Foundation, and 96 for the Main Library) would allow the library branches to remain open every day, for an average of 69 hours per week. The plan envisions an annual per capita budget of \$40.53 (in 2008 dollars), putting the system slightly above the peer average of \$34.68 per capita. A doubling of personnel costs, so that the system could provide high quality service and operating hours would be the source of these higher operating costs. The proposed total capital cost for new and renovated branch libraries in 2008 dollars is \$199,211,191, with completion by 2022.

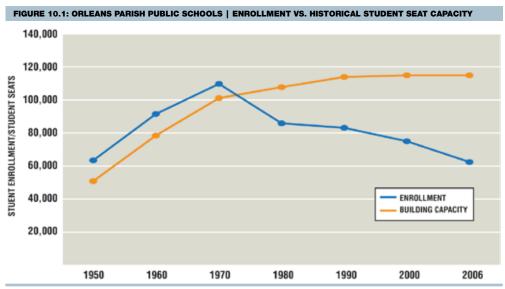
The NOPL Plan locates libraries no more than 2 miles from every residence in New Orleans, with the exception of New Orleans East. It plans for a total of 16 new and renovated library facilities.

5. The New Orleans Public School Facilities

In the next ten to twenty years, New Orleans has the opportunity to rebuild a school district that has historically had some of the most challenged school facilities in the country into a district with some of the best facilities in the country. School facilities, of course, are not under the direct jurisdiction of city government, but are controlled by the School District, a separate taxing district.

The Orleans Parish School Board (OPSB) operated the majority of public schools prior to Hurricane Katrina. Today, the OPSB directly operates five schools and oversees twelve charter schools. The Recovery School District (RSD) was formed by the Louisiana Department of Education to take over schools that were deemed to be "failing." After Hurricane Katrina, a law was passed that moved all "below average" schools from OPSB oversight to the RSD. Today the RSD directly operates about 30 schools and oversees about 30 charter schools. The OPSB retains ownership of all public school properties.

Many monumental school facilities were built in the early 1900s by school board staff architect E. A. Christy. With the expansion of the city and changing demographics, new schools were built at the mid-century mark to accommodate a growing population. This system, representing construction roughly from the early 1900s through the 1960s, makes up the majority of the public school campus portfolio today. From the 1960s through the 1970s, the school system increasingly had more student seats than enrollment, as the city lost population. This excess in school facilities continued until the landfall of Hurricane Katrina and the damages caused by the storm. Prior to Hurricane Katrina, there were roughly 128 school campuses in operation. Today, there are 86 public school programs operating citywide.



SOURCES: ENROLLMENT

- "ORLEANS PARISH SCHOOL BOARD DISTRICT-WIDE DEMOGRAPHIC PROJECTIONS," URBAN SYSTEMS, INC. AUGUST 1998.
 HISTORICAL SEAT CAPACITY—BUILDING CAPACITY ESTIMATES ARE BASED IN ORIGINAL BUILDING DESIGNS.
- PROPOSED PUBLIC SCHOOL BUILDING PLAN WITH A FIVE-YEAR IMPROVEMENT PROGRAM, HARLAND BARTOLOMEW AND ASSOCIATES. AUGUST 1950.
- PLANNING SUB-DISTRICT PROFILES: VOLUMES 1–13, NEW ORLEANS PUBLIC SCHOOLS, DEPARTMENT OF PLANNING, VARIOUS DATES IN 1983–1984.
- NEW ORLEANS PUBLIC SCHOOLS, FACILITY ISSUES REPORT #90-01: OVERCROWDING, DEPARTMENT OF FACILITY PLANNING, MAY 9, 1990.
- NEW ORLEANS PUBLIC SCHOOLS MANAGEMENT STUDY: CONSTRUCTION, MAINTENANCE AND CUSTODIAL OPERATIONS, A.T. KEARNEY & COMPANY, INC., JUNE 1968.

The OPSB and the Louisiana Board of Elementary and Secondary Education (BESE), the state board with oversight responsibility for the RSD, approved a School Facilities Master Plan, with amendments from both superintendents, in November 2008. The resulting billion dollar construction program represents the renovation or construction of 68 K–8 school facilities and 19 high school facilities, in order to create or rebuild a school that is accessible to children in every neighborhood to the extent feasible, based on student population. In addition, the plan calls for the land banking, adaptive reuse or demolition of 48 school facilities. As is always the case, the plan was controversial because individual neighborhoods or school communities where schools were slated for closure are reluctant to see their local school eliminated. Although there may still be changes as the plan is implemented over a number of years, it appears inevitable that a number of school buildings will be closed, with their buildings either used for another purpose or demolished. This situation is not unique to New Orleans but a reflection of the smaller families and greater number of households without children that are typical of all American cities in the 21st century.

From the point of view of this master plan, the key issues related to the School Facilities Master Plan are:

- The need to make schools accessible to all neighborhoods.
- The need to make responsible decisions about the renovation or replacement of historic facilities.
- Incorporation of energy conservation and sustainable design into the design, construction, and operations of new buildings and building renovations.
- An ongoing and diligent exploration of real estate acquisition options available to expand site sizes and in some cases to improve site locations.
- Engagement of the community and stakeholders at school and neighborhood levels in the design and implementation of these recommendations.

6. Judicial and Parochial Facilities

City and parish judicial departments include:

• New Orleans First and Second City Courts; Municipal Court; and Traffic Court

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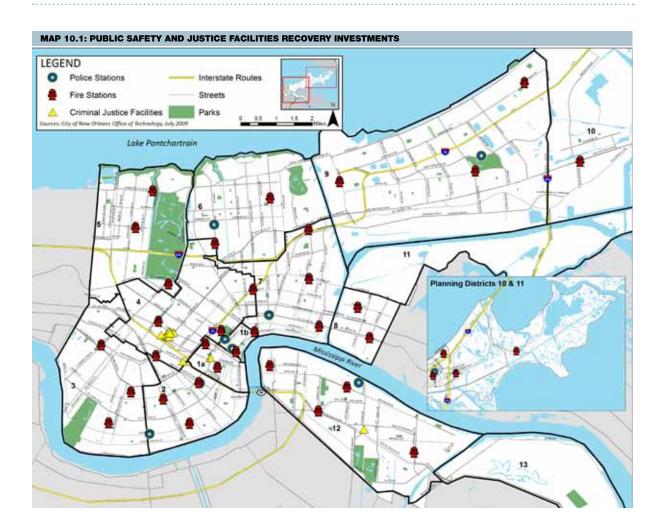
• Orleans Parish District Attorney's Office; Coroner's Office; Juvenile Court; Civil District Court; Criminal District Court; Criminal Sheriff's Office; Criminal Clerk's Office; Registrar of Voters

These parish and city judicial offices account for approximately \$48.5 million from the General Fund, with \$1.5 million in Louisiana Law Enforcement Commission funds the only other significant funding source.

FEMA has allocated \$188.4 million for justice system infrastructure and in 2008 voters approved the extension of an existing tax that would raise an additional \$63 million. The projects will include a \$131 million jail with 1,500 beds and other facilities, a \$41.3 million juvenile offender complex, and improvements to municipal and traffic court buildings, the coroner's office, the district attorney's office and a new evidence storage facility.

The criminal justice system is under the Orleans Parish Criminal Justice District led by an elected Sheriff. After extensive damage to facilities in the aftermath of Hurricane Katrina, a Justice Facilities Master Plan (JFMP) was developed in 2007. The Justice Facilities Master Plan proposed redevelopment of the Tulane/Broad facilities into a campus divided into three zones: Police, Courts and Sheriff. The plan includes 12 prison facilities and several administrative buildings, and recommends use of existing facilities as well as new facilities to consolidate compatible uses, such as a Consolidated Crime Lab, Coroner's Office and Evidence Storage. Estimated cost is approximately \$1 billion with about 10 years for completion. Funding for many of these projects has not been secured.

For more information, see: http://www.sfmpop.org/.



A proposal for a new \$150 million judicial center, consolidating criminal, civil and municipal courts in a 12-story courthouse on a site adjacent to the existing district court building, as well as a new district attorney's office and support buildings has encountered resistance. Keeping the civil court downtown instead of moving everything to the Tulane/Broad location is preferred by the legal community and makes sense from a planning point of view because it keeps court activities and judicial employees downtown. A new \$185 million law enforcement center, which will also house the city's fire department and emergency preparedness agency, is planned to replace the New Orleans Police Department headquarters. The center will be elevated to withstand flooding and designed to allow emergency response services to function during disasters and emergency situations. At a cost of more than \$62 million, new permanent facilities to house the coroner's office and police crime laboratory and evidence storage is expected to be one of the first projects undertaken.

Federal funding has reimbursed the sheriff's office for temporary housing for jail personnel; content replacement for the men's prisons, the Conchetta Women's Prison and for various office buildings; and replacement of K–9 dogs, training equipment and warehouse supplies. In total, FEMA has obligated more than \$273 million toward the recovery of the criminal justice system in New Orleans, including nearly \$129 million for the NOPD and \$84 million for the Criminal Sheriff's Office. The remaining funding reimburses the Coroner's Office, Orleans Parish Civil Sheriff's Office, Clerk of the District Court, the

⁶ Correctional News. "\$1 Billion Justice Complex Planned for New Orleans." Website: <a href="http://www.correctionalnews.com/ME2/Audiences/dirmod.asp?sid=&nm=&type=news&mod=News&mid=9A02E3B96F2A415ABC72CB5F516B4C10&tier=3&nid=69C3908018D3476097541AD2E48860EC.
Retrieved March 1, 2009.

Orleans Parish District Attorney and others for repairs and replacement of facilities and equipment damaged by Hurricane Katrina." FEMA is coordinating development and financing efforts to re-establish the city's justice infrastructure, but will defer to local agencies on specific matters of facility design and location. According to FEMA, all initial recovery projects for NOPD and sheriff's office have been obligated.

Some of the \$240 million in federal funds are already being used by the city to repair essential buildings, including police headquarters, municipal court buildings and the district attorney's office, which were damaged during Hurricane Katrina. Nineteen projects for justice facilities are underway as of mid-2009, ranging from replacement of mechanical systems to design and construction of new facilities.

7. Energy: Electricity and Gas

Entergy New Orleans is a utility supplying electricity and gas to the East Bank of New Orleans, with Entergy Louisiana supplying the West Bank. The utility is regulated both by the Louisiana Public Service Commission and the New Orleans City Council. Two generating stations are located in eastern New Orleans. Entergy New Orleans in December 2008 had more than 140,000 electricity customers, down from 190,000 before Hurricane Katrina, and more than 92,000 gas customers, down from 144,000. The impact of Hurricane Katrina on Entergy services was severe and Entergy New Orleans operated in bankruptcy for about two years. A \$200 million federal Community Development Block Grant (CDBG) grant helped restore the system, but repairs are still needed. The parent company, Entergy Corporation, has its headquarters in New Orleans.

Particularly after failure of major transmission lines during Hurricane Gustav in 2008, concern about the vulnerability and resilience of the electric grid increased. There is also interest in a long term plan to bury utilities in neighborhoods as a matter of beautification. Entergy argues that hardening utilities by burying them or building in redundancies would cost its customers five to ten times the cost of current building standards, if they had to shoulder the entire burden. The company advocates for a Gulf Coast infrastructure plan that would bring federal dollars to help pay for storm hardening.

In its role as utility regulator, the New Orleans City Council allows or rejects rate increases requested by Entergy. The Council's Utility Committee has been working to keep rates down and make the city more energy efficient. The current rate system tends to encourage consumption as a way for the utilities to make money. Entergy is now required to use the Integrated Resource Planning (IRP) approach to planning for the future and Demand Side Management (DSM) to promote approaches and actions that limit the need for new infrastructure. The IRP approach requires evaluation of supply and demand options; minimizing costs to all stakeholders, not just to the utility company; and flexibility that allows for adjustments in response to changed circumstances. DSM focuses on energy conservation and efficiency programs; load management programs that redistribute energy demand to be more even throughout the day; and strategies to increase energy use in traditionally low-demand periods.

In 2007–2008, the City Council designed the Energy Smart New Orleans Energy Efficiency Program, intended to reduce power consumption and utility bills. Elements of the plan include:

- 2,500 homes and small businesses annually to become more energy efficient
- 300 low-income and elderly homes to be weatherized annually
- Installation of 500 solar energy systems annually

Louisiana Homeland Security and Emergency Preparedness website: "Update On The Recovery Of The New Orleans Criminal Justice System." http://www.loep.state.la.us/archive/1603crimejustsys.htm. Retrieved March 1, 2009.

Correctional News. "\$1 Billion Justice Complex Planned for New Orleans." Website: http://www.correctionalnews.com/ME2/Audiences/dirmod.asp?sid=&nm=&type=news&mod=News&mid=9A02E3B96F2A415ABC72CB5F516B4C10&tier=3&nid=69C3908018D3476097541AD2E48860EC.
Retrieved March 1, 2009.

Uouisiana Homeland Security and Emergency Preparedness website: "Update On The Recovery Of The New Orleans Criminal Justice System." http://www.loep.state.la.us/archive/1603crimejustsys.htm. Retrieved March 1, 2009.

- Contractor training and certification
- · Education for contractors and the public on making buildings energy efficient

In late 2006, the Council designated \$1.85 million from a federal energy utility settlement to begin funding the Energy Smart program, which is expected to cost \$54 million over 10–15 years and deliver \$106 million in benefits.

B What The Public Said

During the Master Plan project, principles and issues relevant to this chapter that emerged include:

- Schools, health care centers, and community centers should be located in all areas of the city.
- Schools should be within walking distance of every neighborhood.
- School buildings should be available for multiple purposes (youth programs, community centers, neighborhood libraries, *etc.*)
- Facilities that should get first priority for improvements are: health care/hospitals/clinics (especially community based clinics); schools; community centers/multi-purpose centers/shared-use facilities; libraries

What this means is that communities have identified the key institutions that shape the viability and success of their neighborhoods priorities for the city. Most participants in a community forum also agreed that the city should prioritize infrastructure investments in areas that are currently in the worst condition, and therefore in the most need. Responses also suggested that the city should plan infrastructure systematically and coordinate among agencies and avoid piecemeal ad-hoc investments. Citizens often give the example of streets recently repaired being opened up shortly afterwards for utility or other subsurface infrastructure work. Investments should also be prioritized by their ability to improve flood and/or hurricane resistance.